

# -Y-12 BULLETIN

A Newspaper For Y-12 Employees of Union Carbida Corporation—Nuclear Division

Vol. 22 — No. 29 6-14013 OAK RIDGE, TENNESSEE

Wednesday, July 31, 1968



James E. Thompson Jr.

#### 'Coulomb Excitation' Topic For Physics Seminar

Friday's Physics Division seminar centers around the subject "Coulomb Excitation of  $^{152}\mathrm{Sm},$   $^{166}\mathrm{Er},$   $^{172,174,176}\mathrm{Yb}.$  Leading the seminar will be Royce O. Sayer, of the Physics Division.

The seminar is set for Friday, August 2, at 3:15 p.m. in the East Auditorium of ORNL's 4500 build-

#### 'If I Had Only' Are Most Useless Words

The most useless words in the world are "If I had only . .

"If I had only been more careful," said the man in the cast, "I would not have fallen off the ladder.'

"If I had only taught my son to swin," said the parent of a lake

"If I had only fastened my seat belt," said the man after the nearfatal auto accident.

Turn your "If I had only's" into "I did and I'm glad's!"

# J. E. Thompson Named Metal Prep Foreman

#### To Assume Duties Tomorrow, August 1

The Metal Preparation Division announces the promotion of James E. Thompson Jr. from an engineering assistant in the Development Division to a process foreman. The promotion is effec-

tive tomorrow, August 1.

Thompson, a native of Knoxville, came to Y-12 May 7, 1951.
He worked with several firms in Lenoir City, and from 1947 until 1948 was with the Gates Rubber Company, Denver, Colorado. From 1949 he was with Trotters Esso Station, Knoxville, and in 1951 worked with the Nesbitt Bottling Company, Birmingham, Alabama.

The Thompsons live on High-land Circle, Lenoir City. Mrs. Thompson is the former Mary Jennings, and the couple has three daughters, Edith, in the second grade; and Theresa and Jean, both under school age.

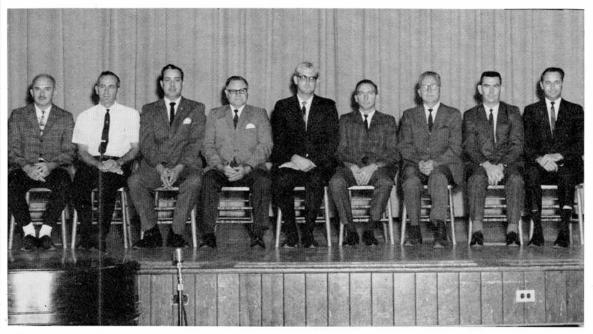
Thompson spends a lot of time hunting and fishing in the fields and streams around Lenoir City.

#### You Must Register Before Voting!

Are you registered to vote? To be elected this year are 34 U.S. Senators (neither senator in Tennessee is up for election) . . . all 435 seats in the U.S. House (Congressmen must face election every two years) . . . 21 governors (Tennessee's governor will serve until

Also at stake are many local elective positions.

You have to be registered to



JUNE 'GRADUATES' of TAT's Pre-Service Vocational-Technical Teacher Institute are seen above . . . from left, Warren F. Cartwright, Roy P. Russell, Alvin C. Lay, Harley C. Orange, Billy G. Myers, Thomas W. Avera, Richard E. Dew, William C. Fraley and Thomas L. White. White, Orange, Myers, Fraley, and Avera completed the course . . . the others received certificates of attendance.

#### Mitchell To Speak **At Statistics Lecture**

The Statistics and Probability lecture series continues next week with T. J. Mitchell discussing "Design of Experiments and Response Surface Methodol-

The lecture is set for Monday, August 5, at 9 a.m. in the Central Auditorium of ORNL's 4500 build-

#### DRIVER EDUCATION

Driver training is becoming more and more popular as a means for cutting traffic accidents. As someone has put it, "We need more road's scholars."

## **Vocational Teacher Institute Ends With 65 Participants**

of the Training and Technology Project's Pre-Service Vocational Technical Teacher Institute.

E. C. Merrill, dean of the University of Tennessee's college of education, spoke at the rites.

A total of 65 participants re ceived certificates from the Institute, which is fully approved and accredited through the UT College of Education. Most of the students will apply the credits toward degrees in industrial education with specialization in electronics, machining, drafting, or

Approximately 30 different courses were offered to participants during the 1967-68 academic year at Y-12. Instructors were staff members of the University and Y-12ers.

The project, supported by the U. S. Department of Labor and the U. S. Office of Education, is

# Completion ceremonies were designed to demonstrate the use

held last month marking the end of industrial and university resources in developing programs in manpower training and vocational-technical teaching. Management services are provided by Oak Ridge Associated Universi-

Of the 65 participants, 26 have completed the coursework offered at TAT, and three were awarded the BS degree in industrial edu-cation at UT graduation rites June 9. Several others are within one or two quarters of receiving their undergraduate degrees. Five men have received fellowships for graduate study in industrial edu-cation, four to U.T. and one to the University of Missouri.

In addition, a number of the participants have received sufficient credit for a temporary teaching certificate in most states.

Most of the students who have attended the Institute full time are ex-military personnel, while the remaining participants were employees of Union Carbide and ORAU. Carbiders completing the course were Thomas W. Avera, Lynn H. Bell, William C. Fraley, Billy G. Myers, Harley C. Orange and Thomas L. White. Receiving certificates of attendance were Paul F. Boyer, George A. Burton, Loyd E. Cantrell, Warren, F. Cartwright, Richard E. Dew, Lewis W. Fields, Roscoe W. Fields, Robert L. Gouldy, Alvin C. Lay, Charles

A U.S. GOVERNMENT PATENT APPLICATION has been filed on a joint development by two Y-12ers. 'Carbonaceous Coating for Carbon Foam,' the joint effort of G. R. Peterson and C. E. Stooksbury, brought on the application. Above they receive their congratulatory letters . . . Peterson gets his from Harvey Kite, left; and Stooksbury gets his from W. K. Whitson, former superintendent of the development division.

#### **Bear Creek Lane** Signals To Be Used

Repaying began this week on the Bethel Valley Road, extend-ing from the U.T. Agricultural Research Laboratory to Oak Ridge National Laboratory . . . approximately 6.6 miles.

This repaying is expected to take about three weeks . . . and then the 1.8 miles of Bear Creek then the 1.8 miles of Bear Creek P. Russell, and Jimmie R. Smith. This repaving is expected to running alongside Y-12 will be paved. The lanes will be paved one at a time and only one lane will be out of commission during the work. Lane lights have been installed for out-bound traffic and will designate the proper lane to use. The lane lights will be put into operation after the construction is completed.

Also slated for improvement is another lane of traffic coming from Oak Ridge. The lane at the curve over Bear Creek is being widened.

Y-12ers are urged to use extreme caution and patience as the work progresses.

#### SAFETY SCOREBOARD

The Y-12 Plant Has Operated 128 Days Or 3.782,000 Man-Hours (Unofficial Estimate)

Through July 28 Without a Disabling Injury

Safety At Home At Work, At Play

# The Bulletin

Published Weekly For The Y-12 Employees Of UNION CARBIDE CORPORATION



NUCLEAR DIVISION

JAMES A. YOUNG \_\_



Appalachian Industrial Editor's Association

American Association Industrial Editors

OFFICE Post Office Box Y Oak Ridge, Tenn. 37830 Telephone 3-7100





Miss Katie Margaret Watson WATSON-HOORMANN

Mr. and Mrs. Charlie Webster Watson, 125 Manchester Road, Oak Ridge, announce the engagement of their daughter Miss Katie Margaret Watson to Mr. Gary William Hoorman.

The prospective groom is the son of Mr. and Mrs. A. C. Hoorman, Lima, Ohio.

The bride-to-be graduated from Oak Ridge High School, where she played the flute in the band. She will receive a degree in mathematics from the University of Tennessee in December and plans to do computer work after gradu-

Mr. Hoorman is a 1965 graduate of Oak Ridge High School. He is presently a dormitory counselor

The wedding is planned for 2 p.m., Saturday, August 31, at St. Mary's Catholic Church, Oak

The father of the bride-to-be is in Y-12's Beta Two Machine Shop.

#### Space Grease Developed For Temperature Extremes

many problems conventional lubricants can't handle. Engineered to perform at temperatures ranging from minus 100 degrees fahrenheit to 600 degrees fahrenheit, they withstand oxidation and hold up under intense pressure. In addition, they are completely non- mama sits on the nest during the flammable, are inert to virtually all chemicals and are particularly suited to uses where high-temperature stability is important.

## Well-Known Y-12er Dies In Florida

The plant heard the sad news last week that Finley Creigh, long-time Shift Superintendent employee in Y-12 had died in Florida. He died in a Ft. Myers, Florida, hospital, July 19, as a result of a fall he sustained at his home July 14.



Mr. Creigh had been living in Florida since 1967. He left Y-12 September 1. 1966, after more than 30 years with Union Carbide Corporation.

The old-timer S. F. Creigh is survived by his wife Mrs. Florence M. Creigh; sons, Roderick F. (in Y-12's Technical Publications Department); David H., in ORNL's Glassblowing Shop; 10 grandchildren; and eight step-grandchildren; brothers Edgar, New York; Charles, Philadelphia; Lewis, Ronceverte, West Virginia; Thomas, Sacramento, California; and sisters, Mrs. Sarah Wickert, South Charleston and Mrs. Elizabeth Alderson, Alderson, West Virginia.

Funeral services were held at the Wallace and Wallace Funeral Home, Ronceverte, West Virginia, at 2 p.m July 23. The Reverend Robert Phrangle officiated. Interment followed in the Riverview

Sincere sympathy is extended the Creigh family. The entire plant was saddened to hear of the death of the colorful UCC

#### Wren Makes It Despite Hardships

(Editor's Note: One of the most amazing things about nature is the will to survive often found in living creatures . . . even in plant life. Witness: A cedar tree growing out of apparently solid



rock! The following story was called into the Bulletin office recently by R. M. Addington, Production Analysis.)

The R. M. Addingtons live at Valley View Road, Route 4,

Addington Clinton.

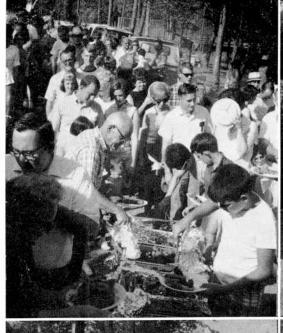
Recently Bob was washing the car and found a tiny bird's nest built into the grillwork on his auto. Apparently the wren had built the nest while the family was on vacation a few days before. (The auto stayed parked in the driveway for about a week.)

After the car washing, it was noted the mama wren dutifully returned to her nest. Addington further noted the next day or so that she would nest on the eggs every night immediately on his return from work.

The Y-12er decided that ma-Fluorinated lubricants are a ternal instincts that strong needed new breed of greases and oils de- some encouragement. He removed veloped to meet the needs of the the nest and built a place for it, space age. In space vehicles and as near to where the car was in equipment used to probe the parked as possible. The mother moon, they are helping solve wren found her newly located nest and took up residence again.

Now the good news . . . all four little eggs have hatched . . . proving that parking a car in the portal with a bird nest in its grill will not deter incubation of wren eggs . . . that is, as long as the cool East Tennessee nights!

To sing is human—to forgive, divine.















ELECTRICAL AND ELECTRONICS DEPARTMENT held their big picnic on Saturday, June 29, at the Clark Center Recreation Park. A total of more than 300 enjoyed the softball, shuffle board, swimming, boating and other games, as well as the eating. Special guests were H. I. Melton and W. F. Smith seen in the upper right photo, from left to right. Looks like there was plenty to eat for all.

#### EXTENSION OPTION

All series E United States Savyear maturity date.

#### GRADING SYSTEM

Yale is taking the position that vears.

#### CRITICAL OF TIME

A local critic of Daylight Savings Bonds now being sold carry grades are not the most important ings Time passed this comment on an automatic 10-year extension part of schooling. We tried to con-recently to a Y-12er: "That extra option beyond their original seven vince our parents of that for hour of day-light is burning my garden up!'

#### Braves, Colts Vie For Softball Top

The Softball League got two games in last Monday before the big storm . . . the Gashouse Gang edged by the Y-12 Pirates 6 to 5. Baldy Clayton punched out a homerun for the losing Pirates, as they earned eight hits to the GG's

The Big Shops belted the Cardinals 7 to 4 in the second action. gaining 14 hits to the Cardinals'

Bill Brucher beat out a fourbagger for the winning team.

Tuesday's games started as the K-25 Colts galloped past the J-Birds 29 to 9. Steve Cates and Jerry Howard both had homers for the winning team . . . Dave O'Kain for the losers.

The Colts took 28 hits . . . one error . . . while the J-Birds put 13 hits, 12 errors on the books!

The Braves came into game two winning big 28 to 1 from the Gashouse Gang, as Tuesday looked like a night of routing. John Evans earned two homers Larry McDonald, Fred Wetzel and Morris Son Put Ray Riggs, all one each for the big Braves.

Charles Hensley accounted for the only run of the game with a homer in the fourth for the losing team.

The Bat Boys made it complete Tuesday by out-distancing the All Stars 17 to 6.

Bob Waters homered for the past four years. losing team . . . as Hugh Beeson got a big triple for the winners.

Hits were divided . . . 20 for the Bat Boys . . . seven for the All Star Team, as a pitcher. The All Stars, errors: Four each.

League standings follow: Team
Braves, Y-12
K-25 Colts
K-25 Gashouse Gang
Big Shops, Y-12
Pirates, Y-12
Eagles, Y-12
Cardinals, Y-12
J-Birds, Y-12
Beta Two, Y-12
Bat Boys, Y-12
White Sox, Y-12
UCC All Stars, Y-12 Team

#### Mee, Hamill Low Men At SW Point

Bill Mee and Bill Hamill fired low at Southwest Point last week as the Golf League got well into its course. The two Bills tied with scores of 36 each, scratch. Hamill's 33 was low in handicap scoring.

The Hamill-Plemons still domi-

week went to Pryson-Ellis over Garber-Huddleston. Other fourpoint victories went to the Trues over Ludwig-East; and Tuell-Goodwin over Groppe-Argo.

League standings follow: Team Hamill-Plemons ... True-True Pryson-Ellis Mee-Wright Ludwig-East Groppe-Argo Garber-Huddleston Tuell-Goodwin



Car pool member wanted from Georgia Avenue. East Village. Oak Ridge, to North or Central Portal, straight day. Eugene Waters, plant phone 3-7614, home phone Oak Ridge 483-9698.

Ride wanted from Grove Park Area, Fountain City, to North Portal, straight day. Cora Cawrse, plant phone 3-7782, home phone Knoxville 688-2471.

It is always time for security.



PITCHER JEFF MORRIS, of the Powell Little League, was recently selected to play on the All Star Team. He is the son of D. Morris, Stores, and plays for the Healthknit team. He pitched a no-hit game last year.

# On All Star Team

Jeffrey Morris, 12-year old son of H. D. Morris, Stores, is topping out his fifth year as a little leaguer, thus finishing his eligibility. He served his first year as a bat boy and has played for the

Jeff plays on the Healthknit No. 10 team in the Powell Little League. He recently made the All Stars began the city tournament last weekend.

Jeff pitched a no-hitter last year for the Healthknit team.

## HossShoe League **Ends Half In Tie**

The Durham-Bailey team and the Case-Miller pair tied in the Horseshoe League's first half, just finished Thursday. (A play-off or pitch-off was set for Monday night).

The Durham-Bailey team won eight last week from Gray-Copeland . . . and had posted five points from Case-Miller in a make-up match.

The Case-Miller team took seven from Wyatt-Hensley nate standings, with a five point and Eubanks-Raper won six from win, however, over Mee-Wright. Hutto-Tillery. The Reed-Stephens The only six-point win of the combo won nine from Young-Hol-

Final standings follow: Team
Durham-Bailey, ORNL
Case-Miller, ORNL
Eubanks-Raper, Y-12
Gray-Copeland, ORNL
Reed-Stephens, Y-12
Wvatt-Hensley, Y-12 Wyatt-Hensley, Y-12 Hutto-Tillery, ORNL Young-Holsopple, Y-12



NORMA SHARLENE BAZEL, 10 months old, is the daughter of Sgt. and Mrs. James Bazel. Norma has three older brothers to keep her entertained, and a grandmother Mrs. Lennie Eskridge to spoil her. Her grandmother is in Y-12's Maintenance. ployment.

## Recreation



Sunday, August 4 SKEET TOURNAMENT: 1 p.m. Oak Ridge Sportsman's Associa-

Monday, August 5

GOLF: Southwest Point, after work, Southwest Point, Kingston. PHYSICAL FITNESS (Women): 7:30 p.m. Oak Ridge High School Girls' Gym.

SOFTBALL: Beginning 6:15 p.m. Pinewood Park, Gashouse Gang vs. Pirates; Eagles vs. Cardinals; K-25 Colts vs. Bat Boys.

Tuesday, August 6 PHYSICAL FITNESS (Men) 7:30 p.m. Oak Ridge High School

PISTOL LEAGUE: 6:15 p.m. Oak Ridge Sportsmen's Associa-

SOFTBALL: Beginning p.m. Pinewood Park. K-25 Colts vs. Eagles; Cardinals vs. USS All Stars; Beta Two vs. Gashouse

Wednesday, August 7 GOLF: Melton Hill League, after work, Melton Hill, Clinton

Thursday, August 8
SOFTBALL: Beginning 6:15
p.m. Pinewood Park. White Sox vs. Bat Boys; Big Shops Braves; Pirates vs. J-Birds.

HORSESHOE: 7 p.m. City Courts, Oak Ridge.

#### **Status Quo Reins** In Melton Hill

The Winstead-Ferguson team maintained their three-point lead in the Melton Hill Golf race last week with a sweeping win over Johnson-Culberson. Wright-Butler kept up there with a similar win over Clabough-Nobles. Other sixpoint sweeps went to Brown-Gresham over Braden - Grubb, Bell-Burrus over Rogers-Thompson and Parker-Parrott over Car-

A four-point victory went to Alvey-Phillips over Morehead-Poly and Butler-Batch over Holly-Kendrick.

Mac Wright turned in a 37 scratch score for low of the week Herm Butler carded a 33 handicap score.

League standings follow: League standings
Team
Winstead-Ferguson
Wright-Butler (Herm)
Alvey-Phillips
Bell-Burrus
Braden-Grubb
Holly-Tilley
Brown-Gresham
Parker-Parrott
Johnson-Culberson
Clabough-Nobles
Rogers-Thompson
Carter-Jones
Tim Butler-Batch
Poly-Morehead

#### A Shift Stages Big Park Picnic

A Shift folks staged a big picnic party Wednesday, July 24 at the juicy melons over. Clark Center Recreation Park. A total of 178 a Barbecued ham was the hit specialty of the day . . . with a game session after the big feed.

Boyd Crowder entertained the his clowning around. H. L. Dickenson kept up the chatter on the bull-horn as the happy picnickers went through the line.

Many of the A-Shift wives brought home-baked pies, cakes and other desserts, as well as cole slaw and trimmings for the ham luncheon . . . DELICIOUS!

The group presented Ann Lawless a polaroid camera as a goingaway present. The A-Shift nurse is resigning to accept other em-



Y-12ER R. J. SPURLING fired a 962-25X recently in the State High Power Rifle Match held in Oak Ridge. Spurling also fired on the All National Guard Rifle Team.

#### Spurling (Again) Shoots High As Rifleers From All Over Shoot Here

First Lieutenant Donice R. Bart- | Ridge Club member, and a memlett, USMC, Quantico, Virginia, returned to Oak Ridge July 13, 14 to dominate the competition by posting an outstanding 990-40X score to win the Tennessee State High Power Rifle Championship Tournament. Another Quantico Marine, Robert A. Gollier, fired a 200-17X to break the National Record for the 200-yard rapid fire stage. More favorable weather conditions enabled Bartlett to exceed the 977-36X he fired to win the Smoky Mountain Tournament at Oak Ridge back in May. Bartlett is a member of the Palma Team which will try to capture the Palma Trophy from Canada on August 23 at Camp Perry, after which he anticipates assignment to Vietnam and a different type of competi-

Y-12er R. J. Spurling, an Oak

#### Shiftmen Enjoy Watermelon Cutting

A little on the warm side . . But otherwise, a very nice day for watermelons . . . says E, F, G, H and J Shifters. It was Sunday, July 21 . . . at the Clark Center Recreation Park that Y-12ers gathered to cut the luscious fruit.

Bill Bonney, chairman of the fiesta, was unable to attend his own party, due to illness . . . but the crowd did appreciate his fine efforts in bringing 50 big, ripe,

Jean Pope and Clyde Cook Jr. with eight adults and two chilyoungsters and oldsters alike with dren was the biggest crowd, but the children honors went to Mike 1969. Getsi as he brought eight of his brood along to feast on the melons.

There were some nice door awards going to S. E. McCoy (a lazy susan) . . . O. Young (silver pitcher), L. T. Nancy (canister set); J. W. Anthony (wall clock) and H. M. Montgomery (emergency flasher).

The next venture will be a turkey shoot probably sometime in September.

ber of the "All National Guard" Rifle Team, captured the state champion title with a 962-25X. G. A. Reimann, last year's state champ, was off his pace this year with a 948-27X and was heard to complain of "an accumulation of rust on the nut that holds the buttplate."

The team match and the 1000yard individual match were held on Sunday, July 14. The UCMC-Smith team fired a 1972-74X, two points shy of a national record, and easily outdistanced the other 17 teams, including the Army teams from Ft. Benning. H. L. Duncan, from Ft. Benning, kept the Army from being completely shut out of the winner's circle in this tournament by firing an excellent 100-18V to win the 1000yard individual match on Sunday.

#### **Dove Season Is Set** With 12-Bag Limit

The daily bag limit on mourning doves in Tennessee remains at 12 this year, while hunters will have a three-way split season in which to hunt.

The dove framework, as issued by the Bureau of Sport Fisheries and Wildlife, stipulated that there be no increase in the daily bag limit, as had been proposed by biologists who had suggested an increase in the limit for experimental purposes.

According to Roy Anderson, chief of the Commission's Game A total of 178 adults and 111 Management Division, Tennessee's children for a grand total of 289 dove season will be held in the came out for the fun. Clyde Cook, following segments: September 2 hrough September 30: October through November 11; and December 23 through January 1,

> Shooting hours will be from 12 noon until sunset daily.

#### RARE VACATION?

Did you take an unusual vacation this year? . . . other than to "work around the house" or "take off to Florida" or to "just fish and loaf"?

Share your interesting travels or "doings" with other Y-12ers. Call 3-7100.

## Joe Davis, A. L. Rosenbalm, Miss Ramsey Retire July 31

No regular retirements are set for Y-12 today, but three old-time employees have elected an early retirement. They are Joe F. Davis, Area Five Maintenance; Billie Gene Ramsey, Chemical Services; and Alfred L. Rosenbalm, Guard Department.

Joe F. Davis, a native of Clinton, came here June 10, 1953, after a varied career. He farmed from 1919 until 1937 at Concord . . . worked with the Dixie Foundry there, with the Sherrill Motor Co., the Knoxville Buick Company and International Harvester Company. From 1943 until 1944 he was with Stone & Webster, here in Oak Ridge, operated a sawmill be-tween 1945 and 1952, and did timber work prior to coming here.

He lives presently at Route 2, Powell.

Mrs. Davis is the former Ida Mantooth, and the couple has five sons . . . James C. and Jackie, Knoxville . . . Bobby C., Kenneth F. and Walter, all of Concord. They also have three daughters, Mrs. Louise Rogers (a Y-12er) and Mrs. Betty D. Sims and Dorris Beavers, of Concord and Chattsworth, Georgia respectively. They also have 12 grandchildren.

The Davises plan a trip to California this fall, with a leisure trip back through Mexico and points of the Far West. They wish to settle in the old Edgemoor community, however, at their present

Miss Billie Gene Ramsey, an operator in Chemical Services, came to work here back in July of 1944. She worked from 1932 until 1944 at Appalachian Mills, Knoxville . . . and these two jobs have occupied all of her employment history.

A native of Stackhouse, North Carolina, she presently lives at 2710 Dayton Street, Knoxville.

The retiree looks forward to days of leisure . . . catching up on her reading and doing more church work (she belongs to the West Lonsdale Baptist Church). Some travel is in store for her . . especially during the winters. A niece teaches school in Sarasota, Florida, and there are other relatives in Louisville, Kentucky. Miss Ramsey has two sisters . . . Mrs. Minnetaki Harper, Knoxville; and Mrs. Marilyn Falin, Nashville.

"One cannot help being nostalgic about leaving your associates of 24 years," she stated, "but I do look forward to my retirement.

Y-12 wishes each of its July retirees days of happiness and

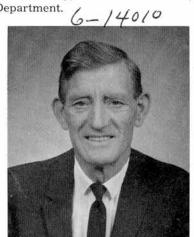
Guard Alfred L. Rosenbalm was born in Rose Hill, Virginia and ocame here August 23, 1952 . . . al- | most 16 years ago.

He served in the U. S. Army from 1929 until 1935 . . . and from 1935 until 1941 was employed by the Miga & Rosenbalm Merchants. He worked with the Tennessee Valley Authority from 1941 until 1943 and operated a billiard parlor in Clinton from 1943 until 1951. He worked with the L&N Railroad out of Louisville from 1924 until 1929.

Mrs. Rosenbalm is the former Josephine Nida. They have three married daughters . . . Mrs. Rita Hackler, Norris; Sandra Meadows, Tampa, Florida; and Sharon Huffstutter, Memphis . . . and seven grandchildren.

Rosenbalm lives at his 16-acre baby farm near Norris where he deals in saddle horses. When he says he is a "horse-trader" you'd better believe it. He currently has seven gaited horses. He plans to fish and bird-hunt and do some real estate work on the side in his retirement.

Plug security leaks.







Alfred L. Rosenbalm

#### American Male Spends Big Cash On 'Hair'

Was the American Indian the first 'hippie?' Male Indians sometimes let their hair grow to lengths exceeding nine feet.

Total dollar volume of men's hair pieces now exceeds \$20 million annually, according to a wellknown U.S. producer of crown covers. Ten years ago men of the 45-year plus year age group were the major buyers of hairpieces Today, the average age has fallen to 35-plus.

#### Jet-Age Ferry Comes To England-France

The day of jet-age ferry service has arrived in Europe. The 130foot long, jet-powered Hovercraft ferry will be able to whisk 256 HISTORIC DOCUMENTS passengers and 30 cars across the English Channel in just about 35 minutes. The present steamer run our government. takes 90 minutes.



July ends and August (named also for Augustus Caesar) makes her debut. More Y-12ers celebrate important milestones with Union Carbide Corporation. Congratulations.

25-YEARS Mary S. Martin, Receiving Department, July 31.

Kenneth F. Brown, Material Control, August 5.

Albert F. Neubert, Research Services, August 5. 20 YEARS

John W. Cottrell, Chemical Services, August 4. 15 YEARS

Carl B. Bridges Sr., Dispatching Department, July 31.

John A. Griffin Jr., H-2 and F-Area Shops, July 31. Lester R. Edwards, Alpha Five

Assembly Area, August 1. Vaughn D. Hendrickson, Build-

ing Services Department, August Leonard M. Brown, Process

Maintenance, August 3.

Jessie N. Greer Jr., General

Weld Shop, August 3. Joe Owens, Area Five Mainte-

nance, August 3.

Edward L. Sheffield, Process

Maintenance, August 3.
Floyd K. Shook, Product Information Center, August 3.

Arthur E. Sands, Alpha Five Processing, August 4.

William A. Norman Jr., Dimensional Inspection, August 5.

David G. Watson, Utilities Administration, August 5.

James A. Wade, Utilities Administration, August 6. 10 YEARS

Craig G. Ross, Civil and Architectural Engineering, August 1. Eddie W. Arrington, A-2 Shops, 9212, August 4.

Jack R. Harrell, H-2, F-Area

Shops, August 4. W. B. McGill, Engineering Mechanics, August 4.

Demothenese N. Sideris, Data

Processing, August 4.

Donald E. Gilliam, A-2 Shops,

9212, August 6. William E. Ramsey, Stores Department, August 6.

#### MSRE Film Is **New From AEC**

A new technical film, describing the design, construction and operation of a new nuclear reactor, is now available for showings from the Atomic Energy Commission here.

"The Molten Salt Reactor Experiment" is a 20-minute color film describing the development of MSRE at the AEC's Oak Ridge National Laboratory. The film was produced by ORNL.

MSRE is a fluid fuel, rather than solid fuel reactor, and large scale reactors of this type could Major Family Outlay breed or produce more fuel than they would consume in operation.

The film points out that breeders of the MSRE type have many practical construction and opera tion advantages. The developmental work involved in building the reactor is discussed in the five per cent a year. film and the internal operations of the reactor are illustrated through extensive animation.

Prints of the MSRE film are available without cost through the Motion Picture Film Library of the local AEC office.

Teacher: Name two documents RIGHT VS. WRONG that have contributed heavily to

Johnny: Forms 1040 and 1040a. end up by doing wrong?

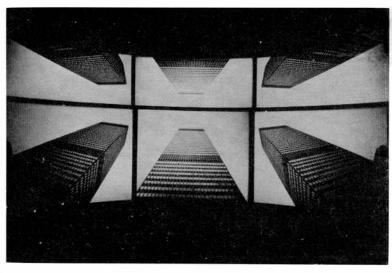


UNION CARBIDE CORPORATION NUCLEAR DIVISION

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SIX-SCREEN CONFIGURATION OF A SKYSCRAPER is taken from the movie "We Are Young," which is shown on "The Shape of Films to Come," an episode of the "21st Century." This and other examples of film techniques for the future will appear in the episode to be broadcast Sunday, August 4, at 6 p.m., EDT, in color on the CBS Television Network. CBS Correspondent Walter Cronkite is principal reporter for the series, which is sponsored in the public interest by Union Carbide Corporation. The program is carried locally by WBIR-TV, Channel 10.

## 'Shape Of Films To Come' Subject For '21st Century' TV Show Sunday

be shown in "The 21st Century" episode "The Shape of Films to Come," to be broadcast Sunday, August 4 at 6 p.m., EDT, in color CBS News Correspondent Walter the series, which is sponsored in the public interest by Union Carbide Corporation. The program is aired locally over WBIR-TV, Channel 10.

"Radical experiments are reshaping the (film) medium," says Cronkite. "Some are by established professionals. Most are done by young people with new ideas. They're cutting the screen into pieces and scattering pictures ing films with computers. Tomorrow, they'll be doing it with lasers.'

A six-screen film, "We Are Young," by Francis Thompson and Alexander Hammid, will be

# College Expense Is

College expenses are the biggest financial problem in many families today-second only to home-buying. Today each diple costs \$7,500 to \$10,000-possibly more—and costs are rising about

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Why is it that those who don't know right from wrong always

Strange and fascinating images | shown. Multiple screens are inwhich will appear on the motion tended to force the viewer to picture screens of the future will move his eyes from picture to picture, increasing his involvement.

Another new device, from Czechosolvakia, stops the film at on the CBS Television network. crucial points so that the audience can vote, through buttons on their Cronkite is principal reporter for seats, on how they want the story to develop. In still another, Ed Emschwiller of New York projects moving images onto the bodies of live dancers, so that soon the spectator can't distinguish live action from film, but gets a vivid impression of motion and color.

"The Shape of Films to Come" was written by David Burke. Fred Warshofsky is science editor for the series; Isaac Kleinereverywhere, on walls and floors man producer and Burton Benand ceilings. Today, they're makjamin executive producer. Sunday, WBIR-TV, Channel 10, at 6



'HELLO, OUT THERE,' says little Cynthia Michell Richardson . . only a day old here on May 28. Cindy is the daughter of Mr. and Mrs. Wayne Richardson, Warren, Michigan. She is the granddaughter of L. E. Richardson, Chemical Services.